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An overview of nurse prescribing in the UK

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Abstract

In the UK and internationally, the nursing profession is continuing to advance and innovate its roles and functions. One area in which this is particularly notable is nurse prescribing. The UK has the most extended nurse prescribing rights in the world, with significant advances in this field over the past two decades. This article reflects on this development, what has been learned and the challenges that remain in relation to nurse prescribing and meeting healthcare service needs.

Keywords

antibiotic resistance, community, community care, medicines, medicines management, nurse prescribing, primary care, professional issues, professional regulation

Key points

- Over the past two decades, there have been significant advances worldwide regarding the roles and functions of nurses, who have developed innovative and extended roles, including the capability to prescribe medicines. Nurses in several countries can now prescribe, including the UK, US, New Zealand, Netherlands, Ireland, Australia, Canada and Sweden (Kroezen et al 2011).
- The UK has the most extended prescribing rights in nursing worldwide (Ball et al 2009, Kroezen et al 2011).
- The number of nurse prescribers in the UK steadily increased between 2011 and 2016 (Courtenay et al 2017a) and will continue to do so to fulfil the workforce needs of the NHS (NHS England 2014, NHS Health Education England 2016).
- Learning to prescribe may be considered one of the most personally challenging areas of development for nurses, with many perceiving prescribing decisions to be complex (McIntosh et al 2016).

There have been significant advances in the UK over the past two decades with regards to the prescribing of medicines by nurses. This article provides the background to nurse prescribing, including some of the legislative and policy changes that have taken place. It outlines nurse prescribing training, along with the research evidence that demonstrates the contribution of nurse prescribing to healthcare services. This article also discusses the ongoing challenges in nurse prescribing and meeting healthcare service needs.

Many nurses perceive prescribing decisions to be complex, and consider learning to prescribe to be one of the most personally challenging areas of development (McIntosh et al 2016). The Nursing and Midwifery Council (NMC) Standards of Proficiency for Nurse and Midwife Prescribers were published in 2006, and provide the regulatory framework for all nurse and midwife prescribers in the UK. They comprise a lengthy document supported by a series of circular amendments. However, the NMC (**NMC 2017**) is currently consulting on these standards of proficiency. As part of these ongoing consultations, they have proposed the use of the Royal Pharmaceutical Society (**RPS**) (**RPS 2016**) competency framework for all prescribers on the NMC register, and the possibility of including prescribing knowledge and skills in undergraduate nurse education. This article considers the potential effects of these changes.

Background to nurse prescribing

Over the past two decades, there have been significant advances worldwide regarding the roles and functions of nurses, who have developed innovative and extended roles, including the capability to prescribe medicines. Nurses in several countries can now prescribe, including the UK, US, New Zealand, Netherlands, Ireland, Australia, Canada and Sweden (Kroezen et al 2011). Several factors have driven the development of this role, including the need for faster and more efficient access to medicines, improved use of nurses' knowledge and skills, a need to reduce the workload of doctors and address doctor shortages, and the development of advanced practitioner roles (Kroezen et al 2011).

The UK has the most extended prescribing rights in nursing worldwide (Ball et al 2009, Kroezen et al 2011). Community nurses were the first group of nurses in the UK to be enabled to prescribe independently from a restricted list of products published in the Nurse Prescribers' Formulary (NPF) for Community Practitioners (2015-2017). This list includes: laxatives; antifungal preparations; emollients; some analgesics, for example aspirin, paracetamol and ibuprofen; nicotine replacement products; anthelmintics and insecticides; catheter management preparations; stoma appliances; and wound dressings and management products (NPF 2015-2017).

In 2001, independent prescribing (Department of Health (DH) 2001), whereby the prescriber is responsible for the assessment, diagnosis and decisions about the clinical management required in patients with diagnosed or undiagnosed conditions, was extended to enable other groups of registered nurses to prescribe. It was later further extended to enable other healthcare professionals to become non-medical prescribers (NMPs), such as pharmacists (DH 2006), optometrists (DH 2007) and allied health professionals such as physiotherapists and podiatrists or chiropodists (DH 2013). Independent prescribers are able to prescribe any medicines within their area of competence independently or via supplementary prescribing. A supplementary prescribing approach involves a written agreement between the patient, doctor and supplementary prescriber on a list of medicines from which the supplementary prescriber is able to prescribe and is designed for the management of long-term conditions where patients have a confirmed diagnosis (DH 2005).

The number of nurse prescribers in the UK steadily increased between 2011 and 2016 (Courtenay et al 2017a) and will continue to do so to fulfil the workforce needs of the NHS (NHS England 2014, NHS Health Education England 2016). If accepted, NMC (**NMC 2017**) proposals to include prescribing knowledge and skills in undergraduate nurse education will support this increase in the number of nurse prescribers.

Training to prescribe

The V100 qualification, which has been incorporated into the qualifying programme for specialist practitioners, enables district nurses and specialist community public health nurses – including health visitors and school nurses – to prescribe. This comprises a combination of taught study days and clinical practice days. Community staff nurses with two years' experience in the area in which they intend to prescribe, but without a specialist qualification in community nursing, are also able to prescribe from the NPF (2015-2017) after completing the V150 qualification, which is a 10-day stand-alone course (NMC 2009).

Training for nurse independent/supplementary prescribing – the V300 qualification – is typically six months in duration, and currently involves a minimum of 26 days in the classroom and 12 days of supervised learning in practice (NMC 2006). This training is available to nurses with at least three years' qualified experience, of which one year must be in the area in which they intend to prescribe, and who also have the ability to study at degree level. This contrasts with some countries, for example the US, Canada and Australia, where training to prescribe is at master's level and is a component of the advanced nurse practitioner programme, which is usually two years in length (Ball et al 2009). If the Royal Pharmaceutical Society (2016) competency framework is adopted in place of current detailed NMC (2006) standards, its impact on course length will be of interest.

Research evidence

In 2016, there were around 30,000 nurses qualified as nurse independent/supplementary prescribers (NISPs) in the UK (DH 2016), representing around 5% of the nursing workforce. NISPs work in a variety of healthcare settings and prescribe medicines across a range of therapeutic areas, with many frequently prescribing for respiratory conditions and infections (Latter et al 2010, Courtenay et al 2017b). Over 50% of NISPs have an academic qualification at master's level, most have more than five years' qualified experience before undertaking prescribing training, and most prescribe independently; that is, only a small number use supplementary prescribing (Courtenay et al 2017b).

It is evident that nurse prescribers are considered safe (Latter et al 2010); there appear to be few differences between nurses and doctors with regards to the type and dose of medication prescribed (Gielen et al 2014). Furthermore, NMPs' clinical and patient-reported outcomes, such as systolic blood pressure, glycated haemoglobin, low-density lipoprotein, medication adherence, patient satisfaction and health-related quality of life, are comparable to those of medical prescribers (Weeks et al 2016). Stakeholders, including NMPs and patients, are satisfied with nurses adopting this role (Courtenay et al 2011, Stenner et al 2011) and report increased accessibility of healthcare services (Stenner et al 2011). Nurse prescribers themselves describe increased autonomy and satisfaction, and the ability to provide a complete episode of care to patients (Stenner and Courtenay 2008). Increased cost savings have also been demonstrated (NHS Health Education North West 2015).

Ongoing challenges

Community nurses' role in prescribing

Given nurses' increasing contribution to care in the community, and the increased investment in the skills of community nurses, including prescribing (NHS England 2014, NHS Health Education England 2016), it is important that these nurses use their prescribing skills. This has the potential to enhance patient experience and increase cost savings for the NHS. However, although a review of the literature, undertaken over a decade ago, indicated the impact and effectiveness of prescribing by community practitioner nurse prescribers (CPNPs) to be largely successful (Latter and Courtenay 2004), more recent evidence has indicated low levels of prescribing among these nurses (Hall et al 2006, Courtenay et al 2012, Drennan et al 2014).

In a survey of nurse prescribing leads in 28 primary care trusts, Hall et al (2006) identified that of 2,061 nurses qualified to prescribe in these trusts, 16% ($n=336$) prescribed less than once per week. Similarly, Courtenay et al (2012) surveyed NMPs working within one strategic health authority, finding that one third of CPNPs were not using their prescribing qualification. Furthermore, Drennan et al (2014) investigated nurses' prescribing activities in English primary care settings between 2006 and 2010, identified that there was a decrease in the number of CPNPs who actively prescribed (defined as issuing two or more prescriptions per year).

It should be noted that centralised dressings schemes are now in place in many healthcare organisations, whereby dressings are held at a central base and taken to the patient's home for their care, rather than being

prescribed. These schemes have removed the need for dressings prescriptions by community nurses and so will have influenced prescribing patterns. However, this raises the question of why so many nurses have gained a prescribing qualification for it then not to be used in practice. This also conflicts with the evidence that CPNPs view prescribing positively and see prescribing as an important aspect of their role (Downer and Shepherd 2010, Herklots et al 2015), with 10-20% of these nurses going on to become NISPs (Latter et al 2010, Courtenay et al 2017b).

Evidence has indicated that there is an association between confidence to prescribe by community nurses and higher prescribing rates (While and Biggs 2004). However, confidence is only likely to emerge if these nurses have the opportunity to prescribe for the conditions they manage in their practice area. There have been reports that the NPF (2015-2017) is restrictive, and community nurses are sometimes unable to prescribe for the patients that they manage in their practice (Latter and Courtenay 2004, Hall et al 2006).

This is perhaps unsurprising, considering the changes in patients and healthcare service provision over the past two decades (Wilkes et al 2014), and therefore the role of the community nurse, with a shift in focus from general, long-term support and care to an increased focus on health promotion and early intervention (Kelehera and Parker 2013, Roden et al 2016). Therefore, work is underway to ensure that the products listed in the NPF (2015-2017) – which have not changed since its inception in 1998 – reflect the prescribing needs of these nurses. This will become increasingly important if the NMC (NMC 2017) proposals to enable newly qualified nurses to undertake training that would mean they could prescribe from the NPF (2015-2017) are accepted.

Inconsistent implementation of nurse prescribing

Despite the evidence of the positive contribution that NISPs make to healthcare service provision, national evaluations report that this has been implemented inconsistently across clinical commissioning groups and health boards within the UK, and there is significant variance in the number of prescribers working in health boards and healthcare organisations, the number working within healthcare teams, and the range of services and roles in which NMPs work (Latter et al 2010, National Prescribing Centre 2010, Courtenay et al 2017b). This suggests that non-medical prescribing has not been viewed as part of a multidisciplinary, whole workforce approach to meet healthcare service needs.

The NMC (NMC 2017) proposal to adopt the Royal Pharmaceutical Society (RPS 2016) multidisciplinary competency framework goes some way to address this, recognising that all practitioners should demonstrate equal competency across all prescribing decisions. Proposals (NMC 2017) to include prescribing knowledge and skills in undergraduate nurse education, and for nurses with one year's post-registration practice to be eligible for prescribing training, should support nurses' contributions to new and emerging models of care, and aim to address healthcare service needs. However, national research has identified that 20-50% of nurses who undertake prescribing training have an academic qualification at master's level, have received specialist training, and have more than five years' qualified experience (Courtenay et al 2007, Courtenay et al 2017b). Therefore, if NMC (NMC 2017) proposals are accepted, it will be important to ensure that the nurses selected for training are those with the appropriate knowledge and skills to prescribe safely.

Antimicrobial use and resistance

Resistance to antimicrobials is a major global health issue (World Health Organization 2018), and overuse of antibiotics is an important factor in antimicrobial resistance (Costelloe et al 2010). Nurses can influence the development of antimicrobial resistance in various treatment areas. For example, wound management is predominantly a nurse-led discipline (Guest et al 2015). Many wounds, such as leg ulcers, diabetic foot ulcers and pressure ulcers, may require topical antimicrobial dressings, such as those containing iodine, silver and honey, indicated for bacterial colonisation or local wound bed infection management (Edwards and Stapley 2010), and can

be prescribed by community nurses with the V100 or V150 prescribing qualification. The appropriate use of these dressings to prevent and treat critically colonised and locally infected wounds will slow the development of antimicrobial resistance.

Similarly, the appropriate use of antibiotics by nurses for minor infections will also slow the development and spread of antimicrobial resistance. Many nurses work in primary care settings, and frequently prescribe for respiratory conditions and infections (Latter et al 2010, Courtenay et al 2017a). However, existing research has focused on how GPs make prescribing decisions for patients with acute respiratory tract infections. Despite evidence that antibiotics are largely unnecessary for acute respiratory tract infections, more than half of patients who present with a respiratory tract infection to a GP are prescribed an antibiotic (Gulliford et al 2014). In contrast, evidence that has explored the prescribing practices of nurses for patients with these infections suggests that nurses use a range of non-antibiotic management strategies and use a person-centred approach, including the provision of information, reassurance and shared decision-making (Rowbotham et al 2012, Courtenay et al 2017c).

Evidence available that has explored the influences on antibiotic prescribing by nurse prescribers suggests that like GPs, diagnostic ambiguity, and patient pressure, can influence antibiotic prescribing by these prescribers (Rowbotham et al 2012) and although, like GPs, patient expectations have been reported to influence nurses prescribing decisions (Rowbotham et al 2012), there is evidence available that suggests that these expectations are not associated with patients receiving an antibiotic (Courtenay et al 2017c). Furthermore, these prescribers have been reported to perceive themselves to be open to criticism and scrutiny by medical prescribers, and so are very conscious of keeping to clinical guidelines and protocols (Rowbotham et al 2012).

Since antimicrobial resistance is a major health issue, it is important that prescribing training is informed by the experiences of the large number of nurses working in primary care who manage patients with infections. In this way, nurses can have a positive influence in reducing the development of antimicrobial resistance.

Conclusion

The number of nurse prescribers in the UK is steadily rising and will continue to do so to meet the needs of healthcare services. Proposals by the NMC (NMC 2017) to include prescribing knowledge and skills in undergraduate nurse education will support this increase, but may result in new challenges. Therefore, any changes will have to be carefully monitored and evaluated, and their effects on NMC registration will have to be assessed.

Learning to prescribe may be considered one of the most personally challenging areas of development for nurses, with many perceiving prescribing decisions to be complex (McIntosh et al 2016). The NMC is undergoing a consultation on the standards of proficiency for nurse and midwife prescribers (NMC 2006, 2017), and has proposed adopting the Royal Pharmaceutical Society (RPS 2016) competency framework for all prescribers on the NMC register. This proposal is part of a commitment to interprofessional education, and recognises the importance of a multiprofessional approach to prescribing.

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